

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (original): A method of treating an eye, comprising the steps of:
identifying an area of an eye;
focusing a device capable of directing high intensity focused ultrasound (HIFU) energy
on the area;
generating HIFU energy from the device onto the area;
wherein the energy transfer from the device to the area results in an increase in
temperature of the area.

Claim 2 (original): The method of claim 1, wherein the energy transfer results in
contracting the area.

Claim 3 (original): The method of claim 2, wherein the contracting increases tension
on a component of the eye in connection with a lens of the eye.

Claim 4 (original): The method of claim 2, wherein the contracting increases tension
on a component of the eye in an amount sufficient to treat presbyopia.

Claim 5 (original): The method of claim 4, wherein the component of the eye is
selected from the group consisting of a ciliary muscle, a zonule, and a peripheral lens capsule.

Claim 6 (currently amended): The method of claim 2, wherein the contracting
occurs to a peripheral lens capsule and secondarily increases tension of ~~on~~ zonules of the eye.

Claim 7 (original): The method of claim 1, further comprising:
repeating the identifying, focusing and generating a plurality of times on areas of the eye
which result in contracting thereby resulting in treating presbyopia.

Claim 8 (original): The method of claim 1, wherein the area is on a component of the eye selected from the group consisting of inner scleral tissue, longitudinal ciliary muscle tissue and ciliary epithelium.

Claim 9 (original): The method of claim 7, wherein the area is on a component of the eye selected from the group consisting of zonular fibers and peripheral zonules.

Claim 10 (original): The method of claim 1, wherein the area is on a component of the eye selected from the group consisting of peripheral lens capsule tissue and peripheral lens cellular architecture.

Claim 11 (original): The method of claim 7 where the repeating creates an additive effect, and wherein the energy is provided circumferentially on each area.

Claim 12 (original): The method of claim 7, wherein said repeating is continued in a manner so as to result in contracting a distance of about 50 microns or more.

Claim 13 (original): The method of claim 12, wherein said contracting is about 100 microns or more.

Claim 14 (original): The method of claim 13, wherein said contracting is about 200 microns or more.

Claim 15 (original): The method of claim 14, wherein said contracting is about 300 microns or more.

Claim 16 (original): The method of claim 1, wherein the energy results in slowing lens diameter growth.

Claim 17 (original): The method of claim 1, wherein the energy transfer alters the modulus of elasticity of a lens capsule of the eye.

Claim 18 (original): The method of claim 1, wherein the area has no dimension larger than 2 millimeters.

Claim 19 (original): The method of claim 1, wherein the area has no dimension larger than 1 millimeter.

Claim 20 (original): The method of claim 1, wherein the HIFU energy increases the temperature of the area to a temperature in a range from about 47°C to about 100°C.

Claim 21 (original): The method of claim 1, wherein the HIFU energy increases the temperature of the area to a temperature in a range from about 47°C to about 80°C.

Claim 22 (original): The method of claim 1, wherein the HIFU energy increases the temperature of the area to a temperature in a range from about 60°C to about 70°C.

Claim 23 (currently amended): The method of claim 1, wherein said identifying step comprises applying ultrasound scanning imaging to identify the area.

Claim 24 (original): The method of claim 1, wherein said generating is in a pulse having a duration of two seconds or less.

Claim 25 (original): A method to treat presbyopia comprising the steps of:
identifying an area on a presbyopic eye;
focusing a device capable of directing HIFU energy on the area;
generating HIFU energy from the device onto the area;
wherein the energy transfer from the device to the area results in an increase in temperature of the area; and

wherein said energy transfer results in alleviating the eye from its presbyopic condition.

Claim 26 (original): The method of claim 25, wherein said alleviation improves accommodation in the eye.

Claim 27 (original): A method of preventing presbyopia by prophylactically treating a non-presbyopic eye comprising the steps of:

identifying an area on the eye;

focusing a device capable of directing HIFU energy on the area;

generating HIFU energy from the device onto the area; wherein the energy transfer from the device to the area results in an increase in temperature of the area; and

wherein said energy transfer results in preventing the eye from presbyopia.

Claim 28 (original): An apparatus capable of generating HIFU energy comprising:

a transducer comprising ceramic piezoelectric crystals;

wherein said transducer applies HIFU energy to a discrete region within an eye without damaging nearby structures.

Claim 29 (original): The apparatus of claim 28, wherein said transducer has a diameter in a range from about 8 to 10cm.

Claim 30 (original): The apparatus of claim 28, wherein said transducer has a focal length ranging from 1mm to 50mm.

Claim 31 (original): The apparatus of claim 30, wherein said focal length ranges from about 4mm to 10mm.

Claim 32 (original): The apparatus of claim 28, wherein said transducer has a radius of curvature at about 15cm.

Claim 33 (original): The apparatus of claim 28, wherein said transducer operates from about 0.5 MHz to about 10 MHz.

Claim 34 (original): The apparatus of claim 28, wherein said transducer comprises an output range from about 100 to 300 watts.

Claim 35 (original): The apparatus of claim 28, wherein said transducer comprises an output ranges from about 0.1 watts to 50 watts.

Claim 36 (original): The apparatus of claim 28, comprising a plurality of transducers.